IN THE SPECIFICATION:

Please amend the Specification as shown;

Please insert the following on page 7, after line 26;

It is a further object of this invention to make a tear-seal assembly that has features of adhesive masking for the purpose of reducing the pulling pressure required for the initial tear and/or final tear. The adhesive masking may be made repeatably and with precision using a kiss-cut on the release liner that many adhesives use in packaging/storing as a protective liner to protect the adhesive properties of an adhesive tape material used as a component of a seal assembly.

It is a further object of this invention to make a tear-seal assembly using a positioning support, a conductive tear-portion, a conductive tear-guide, a conductive base portion, a conductive ribbon material, a tear-guide, and/or a material that tears straight that does not require a tear-guide, with an initial starter tear, and/or without an initial starter tear.

It is a further object of this invention to make an improved toner hopper with the improved tear-seal assembly, an improved toner cartridge and/or an improved image forming apparatus using the improved seal assembly.

It is a further object of this invention to make an improved method of manufacturing seal assemblies with the features described, including a process of forming a kiss-cut release liner from the protective liner protecting adhesive properties of a tape component of a seal assembly including the process of using the actual release liner or protective liner that protects the tape for adhesive masking.

Please amend the last paragraph on page 7 as follows;

In carrying out this invention in the illustrative embodiment thereof~~, the flat removably adhered install tool comes installed on the strips and after the strips are installed, the tool is merely peeled or otherwise removed very simply. Tool removal after strip installation is simpler than peeling a banana peel because only one strip is peeled, whereas a banana peel requires several strips to be removed. Also, the install tool can in many manufacturing processes improve the manufacturability of the product, depending on how fancy one goes because it is easier to adhesively coat or laminate and die-cut stiff material than it is to do with flexible material~~ tape that is protected with a protective release liner is used in the manufacture of a seal-insert component. A kiss-cut is formed in the release liner to separate a masking portion which blocks adhesive from a non-masking portion so that the seal will tear easier. The non-masking portion of the release liner is removed during the assembly process, and the masking portion of the release liner stays in the seal assembly to block adhesive. It is also novel that the kiss-cut release liner is formed in the same operation as cutting the usually rectangle portion of the seal assembly with an opening, and thus, no extra labor is required in the manufacturing process when using the kiss-cut release liner to mask adhesive.

Please insert the following on page 14, after line 9;

Figure 38E shows an example of a die for die cutting a seal-insert subassembly of a shipping seal assembly which after the die-cutting process will have adhesive masking.

Figure 38F shows an example of a die for die cutting a seal-insert subassembly of a shipping seal assembly which after the die-cutting process will have adhesive masking as it is about

to begin the process of cutting a multilayer material to form a seal-insert.

Figure 38G shows an example of a die for die cutting a seal-insert subassembly of a shipping seal assembly which after the die-cutting process will have adhesive masking shown during the process of cutting a multilayer material to form a seal-insert and forming the kiss-cuts.

Figure 38H shows an example of a seal-insert subassembly of a shipping seal assembly after the die-cutting process which has adhesive masking shown after the process of cutting a multilayer material to form a seal-insert with kis-cuts showing the process of the seal-insert being removed from the unused waste material.

Figure 38I shows an example of a seal-insert subassembly of a shipping seal assembly after the die-cutting process which has adhesive masking that was kiss-cut during the process of cutting a multilayer material to form a seal-insert shown above its die of Figure 38E.

Figure 38J shows the seal-insert of Figure 38I flipped over

Figure 38K shows an example of a seal-insert subassembly of a shipping seal assembly after the die-cutting process which has adhesive masking shown after the process of cutting a multilayer material to form a seal-insert shown after the process of the seal-insert being removed from the unused waste material.

Figure 38L shows a cutaway view of a seal-insert subassembly of a shipping seal assembly after the die-cutting process which has adhesive masking shown after the process of cutting a multilayer material to form a seal-insert showing the process of the center waste portion

being removed from the seal-insert where the bottom release liner of the center portion is not removed.

Figure 38M shows a cutaway view of an example of a seal-insert subassembly of a shipping seal assembly after the die-cutting process which has adhesive masking shown after the process of cutting a multilayer material to form a seal-insert showing the process of the center waste portion being removed from the seal-insert where the bottom release liner of the center portion is included in the removal.

Figure 38N shows an example of a seal-insert subassembly of a shipping seal assembly after the die-cutting process which has adhesive masking shown after the process of cutting a multilayer material to form a seal-insert and after the process of the center waste portion being removed from the seal-insert where the bottom release liner of the center portion is included in the removal.

Figure 38o shows a seal-insert of Figure 38N during the process of removal of the release liner at the non-masking region showing how the release liner of the masking region stays on the seal-insert.

Figure 38P shows a portion of the die-cutting process of a seal-insert where two levels of cut are made so that the seal-insert is cut through all the way through to form the seal-insert, while a masking portion of the release liner is not cut through all layers and a second release liner on the underside is not cut all the way through that is typically used to form the seal-insert of Figure 38L.

Figure 38Q shows a portion of the die-cutting process of a seal-insert where two levels of cut are made so that the seal-insert is cut through all the way through to form the seal-insert, while a masking portion of the release liner is not cut through all layers and a second release liner on the underside is cut all the way through that is typically used to form the seal-insert of Figure 38M.

Figure 38R shows a process of installing a tear-able material and a tear-guide being installed onto a seal-insert.

Figure 38S shows a process of installing a tear-able material without a tear-guide being installed onto a seal-insert.

Please insert the following on page 16, after line 15;

Figure 64a shows a prior art stiffener on the end of a pull-strip.

Figure 64b shows another prior art stiffener on the end of a pull-strip.

Please amend the following paragraph beginning on page 20, last paragraph;

Figure 3C is [[prior art]] in this patent application because it was co-invented in the parent patent of this continuation-in-part. Figure 3C-3D shows a shipping seal assembly 109 which is patent pending by inventor, the parent serial number 08/370,968 of this continuation-in-part. The tear guide 89 provides a pull device for the end-user to pull from the user's location to release the dry toner powder after the tear guide 89 tears the tear material 93. It

starts at the slits 91 and completes the tear at the slits 91 where the tail 90 remains. Figure 3D shows a seal assembly 110 from parent serial number 08/370,968 that consists of the same shipping seal assembly 109 but also containing a positioning stiffener 94 for easier installation of the shipping seal assembly 110. The edge remove handle 95 and end remove handles are sub-components of the positioning stiffener 94 for the purpose of making it easier to remove the positioning stiffener 94 after the shipping seal assembly 110 is installed. Figure 3E shows a [[prior art]] seal assembly being torn from the CIP parent patent toner hopper 97 with an installed shipping seal assembly 110 covering the opening in toner hopper 99, shown after the positioning stiffener 94 was removed. Also shown in Figure 3E is the tear-guide 89 pulled partially which has caused the opening in the seal torn area 98 so that toner powder, previously trapped inside the toner hopper 97, may now fall through the opening 99.

Please amend the following two paragraphs beginning on page 35, last paragraph;

Another embodiment of this invention is another very ergonomic recovery blade assembly 35, shown in Figure 15A and 15B. This blade assembly 35 has infinite possibilities on how it can be made. The diagram in Figure 15A and 15B is just one mere example of this embodiment, although the possibilities are limitless. The recovery blade 40 has an attachment tape/adhesive 41 for attachment to the attach surface 27 and a protective release liner 42 that protects the tape/adhesive 41 prior to use. In a similar way as the procedure of Figures 7A through 7D and Figure 11C, a permanent-removable tape 39 attaches on the removable side to the recovery blade 40 and on the permanent side to the positioning stiffener device 36. The positioning stiffener support device 36 can optionally have flaps of regions with no adhesive for easy and quick removal after installation is done. For example,

any number of partial length removal flaps 37 may be installed on either sides as in the figures, or may be installed on the ends (not shown). The partial length remove flap 37 is not required to be in the center, may have any number of flaps 37 located anywhere on the support 36, nor is it required to be symmetrical nor is it required to be as long as 37 in Figure 15B. There is the long remove flap 38 that may even optionally be full length. This long remove flap 38 also has no adhesive at the grab area just like the partial length remove flap 37. Thus after the recovery blade is positioned and installed, the installer may pull on either remove flap 37 or 38 or a similar one in any location to remove the positioning device ergonomically and not requiring using a knife or razor blade as in Figure 11A. It obviously costs more to manufacture the ergonomic recovery blade 35 than it does to manufacture the recovery blade of Figures 7A through 7C and Figure 11C, and these costs will determine the worthwhileness of this embodiment of this invention. Please note that any positioning stiffener device of this invention whether the simple one 20A through 20D, the easy-grab one 211 or the ergonomic one 36, or any other versions later mentioned in this invention or others similar with the same general idea may be made of any material. However, preferred materials are plastic, metal, cardboard or rubber. Stiff or rigid material is preferred. Of the plastic and rubber materials are, just to name a few, polycarbonate, LEXAN, PETG, polyester, MYLAR, acetate, vinyl, hard rubber, fiberglass, plexiglass, or any other plastic. It should also be pointed out that use of clear material such as clear or semi-clear plastic for the positioning stiffener 36 allows the installer to visibly see and inspect the glue/adhesive line when necessary for more precise positioning by the installer. Also, a glue type containing pigment, [[die]] dye or other coloring may be used for enhanced view through plastic of the glue line. In some applications this may be important and in others it is not. For such a see-through stiffener, a transparent or semitransparent semipermanent glue/tape/adhesive is desired and such materials are available. Visibility of the glue line is

important when converting an SX doctor blade 59 of Figure 16 into a spreader blade 107 shown in Figure 17.

Figure 16 shows a prior art doctor blade 52 of the SX toner hopper 47 (Figure 5). This metal framed electrically charged doctor blade 52 was designed to literally scrape or doctor the toner from over the developer roller 44's surface to control the thickness of the toner on the developer roller 44 and thereby control both the amount of toner used and the relative page darkness. Figure 17 shows this same doctor blade 52 with a urethane spreader blade 106, thus converting the doctor blade 52 into a spreader blade assembly 107. A method of doing this conversion is shown in inventor's patent no. 5,546,162. Figure 20 shows the spacer 108 located on the bare metal portion of the doctor blade 107 from the patent. The spreader blade 106 is also shown cutaway. The purpose of the spacer 108 was to prevent the metal doctor blade 52 from bowing, warping or curving when tightened down with holding screws (not shown) that go through the holes and the spacer's 108 hole. Although this is all described in inventor's patent number 5,546,162, inventor has found a better way to do the job of inventor's patent without requiring the use of the spacer 108. Before showing the next embodiment that does not require the use of the spacer 108, it should also be pointed out that Figure 18 shows a prior art spreader blade assembly 102 for the LX toner hopper 97. The metal assembly frame 101 is used to structurally support the urethane spreader blade 102. Figure 19 shows the NX spreader assembly 103 with the metal frame 104, and the urethane spreader blade 105.

Figure 21A shows the new and improved installation jig 53 for use in assembly of the spreader blade embodiments of this invention. The doctor blade frame 52 is first placed in the installation jig 53 as depicted in Figure 21B in exploded form. The end holes 58 of the doctor blade 52 are lined up with the jig pins 54 to properly place the doctor blade 52 in the

jig 53 for installation of the spreader blade 63 shown cutaway in Figure 22. Figure 23 shows that the jig 53 has end stops 57 for accurate placement of the spreader blade 63 onto the doctor blade 52. The jig also has a step 222 from the jig 53 lower ledge 55 to the jig upper edge 56, so that the surface of the jig upper ledge 56 will be contiguous with the spreader blade bottom surface 224. After the invention that was out in the patent 5,546,162, it has been found that three things are important in proper installation of the spreader blade 63 onto the doctor blade 52. First, Figure 23 shows the accurate placement of the left corner mark 74 of the spreader blade 63 into the left corner mark 73 of the jig 53. Thus the side edge stop 57 of the jig 53 must line up with the edge 115 of the spreader blade 63. Second, it has been also found that the glue line 71 of the spreader blade 63 must also align with the back edge 59 of the doctor blade 52. Third, the right side must similarly align which will be shown in the procedure described for accurate positioning of the spreader blade 63 onto the doctor blade 52. The step by step procedure of this embodiment will be described. Once the doctor blade 52 is placed in the jig 53, as in Figure 21B, then peel the release liner 64 of the spreader blade 63 as shown in Figure 22. Then align the left corner mark 73 of the jig 53 with the left corner mark 74 of the spreader blade 63 and press in one spot only as shown in Figure 23. Press so that the adhesive is only stuck in a small region near the jig left edge stop 57 so that the rest of the spreader blade 63 can be properly positioned using the rest of the procedure being outlined. Next, pull the end of the spreader blade 63 as shown in Figure 24 and stretch if necessary until the hole of the spreader blade 66 fits into the jig pin 54. Then press down on this positioned subsection. Next, without stretching the urethane rubber spreader blade 63, lay down the spreader blade 63 as shown in Figure 25 for about 75 to 80% of the length of the spreader blade 63 as shown in Figure 25. It is important that the glue line 71 of the spreader blade 63 aligns along the back edge 59 of the doctor blade 52. Otherwise, toner powder can migrate under the spreader blade 63 and de-laminate the

adhesive/glue/tape 65 under the spreader blade 63. Glue with [[die]] dye, coloration, or pigment may be used for easier view of the glue line 71. After smoothing down the amount laid down of the spreader blade 63 so far as in figure 25, it is now important to position the right corner mark 72 of the spreader blade 63 with the right corner mark 75 of the jig 53. Then press this portion down up to the right edge 57. Then, Figure 26 shows the pulling of the right end of the spreader blade, and stretching if necessary, until the hole 66 of the spreader blade 63 fits over and into the jig pin 54. It is important that everything be smoothed down at this point so that the glue/adhesive/tape 65 of the spreader 63 can take hold. After completed, the new modified doctor blade 77 with spreader blade 63 should be pulled out of the jig 53 and is shown 77 in Figure 27. The glue line 67 is along the metal blade back edge 59 as well as is possible for best results. In a spreader blade assembly 77, the glue line 67 position is more important than the position of the spreader blade back edge 81 which is opposite from inventor's patent number 5,546,162. The spreader blade front edge 82 position is not critical as is the glue line 67 position. Also, while patent number 5,546,162 used washers 108 to prevent warpage from tightening down converted spreader blade assembly 107, this spreader blade 63 has longer ends to prevent glue de-lamination with holes 66 in the spreader blade 63 to accommodate the holes 58 in the SX doctor blade 52 so that tightening down the screws to tighten the completed spreader blade assembly 77 will not warp the metal doctor blade 52 which would cause problems.

Please insert the following after the end of the first paragraph on page 49;

A Typical Die-Cutting Process: The adhesive masking may be further improved upon by using the very release liner, an ingredient of some adhesive tapes, that is already on the tape to mask the adhesive at the initial tearing and/or final tearing area, or any other location

where the magnitude of the pulling force is to be reduced. This adhesive masking using the release liner can be even further improved by forming precise adhesive masking during the same die-cutting process when a component of the seal assembly is formed, and thus does not require an extra step, but rather uses a die that does both functions of cutting a component and kiss-cut-forming an adhesive mask, all in one die-cut step. Thus, labor is saved. These seal assembly improvements may be implemented in the overall manufacture of a toner hopper, toner cartridge and/or an image forming apparatus.

Figure 38E shows one type of a die 500, as an example only, to show a simple example of how a die-cutting process is done, as other types of dies, equipment such as that on a cylinder of the rotary type may also be used to perform the processes of this patent. The die 500 has, in this example, blades 501 to cut an outer perimeter of a seal-insert, 149, blades 502 to cut an open central portion of the seal-insert, and blades 151A and 152A to separate a masking region 151 and 152 from a non-masking region of a seal-insert 149. The depth of cut of blades 151A and 152A are not as deep as the depth of the cuts of blades 501 and 502 which cut all the way through the material, thus blades 151a and 152a cut at a shallower depth in what is called a kiss-cut, and therefor does not cut all the way through all layers but must cut fully through the release liner layer 144 or the release layer 144. Blades 151A and 152A may also cut into the adherent layer 144a or the tape/adhesive/two-faced tape/glue layer 144a, in the process, which would have no effect, but must cut fully through the release liner layer 144. Blade depths are not to scale and are exaggerated in the Figures to visually show that there is a difference in depth of cut.

Figure 38F shows just prior to the die-cut process the die 500 and the material to be cut. The material 560 has a region 520 showing lines inside where the cuts will be made and a region

510 outside where the cuts will be made. A material 540 is shown under the material to be cut 560, which provides support to the material to be cut 560 in this example. Figure 38G shows where the die blades 501, 502, 151A and 152A are cutting into the material 560. Figure 38H shows the seal-insert 149 being removed from the material 560, leaving some material 560 that will be discarded. Figure 38K shows the seal-insert after separation from the material 560, leaving an opening 530 in the material 560 to be discarded. Figures 38 I and 38J show the seal-insert 149. Figures 38L and 38M show the middles 550A and 550B of the seal-insert 149a and 149 being removed to create an open central region 551 or opening 551 of the seal-insert 149. In the case of Figure 38L, a bottom release liner 145 remains in its original position after the cut process and is not removed with the middle where in the case of Figure 38M, the bottom release liner 145 is cut all the way through and is removed with the middle.Figure 38N shows a seal-insert 149 with an open central region and Figure 38o shows the non-masking portion of the release liner 144 being removed, so that the masking portions of the release liner 151 and 152 remain on the seal-insert 149. Figures 38P and 38Q show how different blade depths or blade levels can be used to form the cuts of Figures 38L and 38M. The blades are 152A for a shallow cut through the upper release liner 144 and blade 502 making a deeper cut to the bottom release liner 145, but not cutting all the way through the bottom release liner 145. Figures 38R and 38S show the tear-able material 137 and 153 being installed on the seal-inserts, adhering to the adhesive 144A and not to the masking release liner 151 and 152. Figure 38R shows a tear-able material 137 with a main body portion and a pull-strip where the pull-strip is a tear-guide 88. Figure 38S shows a tear-able material 153 with a main body portion and a pull-strip 89A where the pull-strip 89A is not a tear-guide 88.

On page 49, second paragraph, please amend as follows;

In patent number 5,523,828, a seal assembly is discussed that reduces the tearing force required to pull a tear subassembly such as that described as 153 combined with perimeter adhesive. This patent uses slits(cuttings), foam, an aperture, rows of holes, an opening, two cuts at the beginning of the tear, a support under the pre-tear, which may be at either or both ends. In [*this*] this present patent application, not only is the tearing force lowered as described by patent number 5,523,828, but also, the tear is controlled and de-lamination of the tearing subassemblies 137 and 153 is prevented by using the device and methods described above. It should also be pointed out that [*this*] this inventor's patent number Re. 35,529 shows the first positioning stiffener device and dates back to January 1993 while patent number 5,523,828 disclosed a stiffener in September 1994, around one year and eight months later.